



REQUEST AND RECOMMENDATION

ONE-YEAR OPTION

900+ Clock Hour Programs – Precision Machining

Background:

To provide another option for adult students to apply prior learning toward a degree, Ohio legislators established what has come to be known as the One-Year Option through Section 363.120 House Bill 59 of the 130th General Assembly. The Chancellor of the Ohio Department of Higher Education, in consultation with the Superintendent of Public Instruction and the Governor's Office of Workforce Transformation, was tasked to establish a One-Year Option credit articulation system in which graduates of Ohio's adult career-technical institutions who complete a 900-hour program of study AND obtain an industry-recognized credential approved by the Chancellor will be able to receive 30 technical semester credit hours toward a technical degree upon enrollment in a public institution of higher education. The Chancellor was also to recommend a process to award proportional semester credit hours for adult career-technical institution students who complete a program of study between 600 and 899 hours AND obtain an industry-recognized credential approved by the Chancellor. The Chancellor convened a broad group of stakeholders to develop a system of articulation for the One-Year Option that was presented in a report to the legislature called, *"Getting to 30: Establishing a One-Year Option Credit Articulation System for Ohio."*

In order to implement the system of articulation developed with the stakeholders as well as address accreditation requirements for degree granting institutions, the Chancellor convened Credit Affirmation Teams (CATs) to conduct a peer review of programs and certifications for affirmation for a block of 30 semester hours of technical credit. The CATs were comprised of faculty and administrators from Ohio Technical Centers (OTCs) and an equal number from public degree granting colleges and universities in Ohio. The CATs were organized by four discipline clusters: Health and Allied Health, Building and Industrial Technology, Business and Information Technology, and Services. They were charged with reviewing the certifications and, if necessary, program content, to affirm that students completing the selected program at an Ohio Technical Center and earned approved certifications had demonstrated competencies equivalent to 30 semester hours of technical credit. This technical credit would then be granted, as a block, upon enrollment in a degree granting institution. Additional subject matter experts were consulted when core team members did not have sufficient content knowledge of the program being reviewed.

Recommendation

As detailed in the attached template, the Building and Industrial Technology Credit Affirmation Team recommends that students will be eligible for a block of 30 semester hours of technical credit towards an *Associate of Technical Studies in Building and Industrial Technology* when:

- the student has successfully completed a 900+ clock hour program in Precision Machining at an Ohio Technical Center.

And currently holds **ALL** of the following credentials:

- NIMS Machining Level 1
- OSHA 10- General Industry

Please note all certifications must be current and valid. Student must have completed the Ohio Technical Center program within 5 years.

End of Comment Period: August 18, 2016 at 12:45 pm

No comments received, recommend approval

RECOMMENDATION

The Vice Chancellor of Academic Affairs has verified that this pathway has met the standards and requirements of the Ohio Board of Regents.

Davidson

8/19/16

Stephanie Davidson, Vice Chancellor of Academic Affairs

Date

APPROVAL

John Carey
John Carey, Chancellor

9/8/16
Date

6/10

One-Year Option
900 Clock Hour Certification Affirmation

The Program Affirmation is designed to provide a common matrix for a peer review process acceptable to the Higher Learning Commission to soundly affirm 30 semester hours of technical credit for Ohio Technical Center graduates who are eligible for the One-Year Option. The template should be completed for every program/subject and signed by the co-chairs of each of the four-cluster program areas for every Industry-recognized credential and program reviewed.

Please note: All Ohio Technical Centers must be accredited by one of the following: [Council on Occupational Education \(COE\)](#) and/or [Accrediting Commission of Career Schools and Colleges \(ACCSC\)](#).

Program Name: Machine Tooling Technology/Machinist CIP Code: 48.0501	Cluster <input type="checkbox"/> Business & Information Technologies <input type="checkbox"/> Health/Allied Health <input type="checkbox"/> Industrial Trades <input type="checkbox"/> Service Industries & Agriculture	
CIP CODE DEFINITION		
A program that prepares individuals to apply technical knowledge and skills to plan, manufacture, assemble, test, and repair parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, pressed, fused, stamped or worked.		
STEP ONE: CREDENTIAL REVIEW		
	Details/Explanation	Comments
Primary Industry Credential (if there are competing certifications complete page multiple times)	Name: The National Institute for Metalworking Skills (NIMS) Certifications Type: <input type="checkbox"/> License <input type="checkbox"/> Registry <input checked="" type="checkbox"/> Certification	Certification: <ul style="list-style-type: none"> National Institute for Metalworking Skills (NIMS): Machining Level 1
Program requirements by credentialing body.	The National Institute for Metalworking Skills (NIMS) was formed in 1995 by the metalworking trade associations to develop and maintain a globally competitive American workforce. NIMS sets skill standards for the industry, certifies individual skills against the standards and accredits training programs that meet NIMS quality requirements. Credential is earned by the student passing a standards-based assessment to test if the student has learned the theory components and a performance examination to test if the	NIMS operates under rigorous and highly disciplined processes as the only developer of American National Standards for the nation's metalworking industry accredited by the American National Standards Institute (ANSI). Educational institutions use the NIMS credentials as performance measures and as the basis for articulation. For example, Pennsylvania requires all machining students to test for NIMS. U.S. Army

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	<p>student can apply the theory in a practical assessment. NIMS Machining Level 1 contains 11 distinct credentials. Overall there are 52 NIMS Credentials</p>	<p>machinist trainees earn NIMS credentials. The Robert C. Byrd Institute requires NIMS credential for the earning of the Associate Degree in Manufacturing Technology. An ever-growing number of colleges and universities award credits to high school students and to company employees for NIMS credentials.</p> <p>Ohio Technical Center 900 Clock Hour Programs must be accredited by The National Institute Metal Working Skills, Inc. https://www.nims-skills.org/web/nims/5</p> <p>Complete Guide to NIMS Credentialing Program: Educational Programs. https://www.nims-skills.org/c/document_library/get_file?folderId=230729&name=DLFE-3805.pdf</p>
Hour Requirements (includes any instructional, lab/practice hours, or internship hours).	<p>Most trainees can acquire the core Level I Machining Skills in six months to one year of education and training, depending on prior manufacturing experience, basic academic skills, mechanical aptitudes, and the availability of laboratory-based training. All competencies must be covered. Program hours may vary per program base on local advisory business/industry committees.</p>	<p>The National Institute for Metalworking Skills, Inc http://www.tssb.org/sites/default/files/wwwpages/repos/pdfiles/machinist1.pdf</p>
Competencies demonstrated by credential attainment.	<p>National Institute for Metal Skills: Machining Level 1</p> <ul style="list-style-type: none"> • Measurement, Materials and Safety • Job Planning, Benchwork, & Layout • Manual Milling Skills I • Turning Operations: Turning Between Centers • Turning Operations: Turing Chucking Skills • Grinding Skills I • Drill Press Skills I • CNC Turning: Programming Setup & Operations • CNC Milling: Programming Setup & Operations 	<p>Each equipment specific module typically contains operation, controls, maintenance, and safety guidelines.</p> <p>The National Institute Metal Working Skills, Inc https://www.nims-skills.org/c/document_library/get_file?folderId=230729&name=DLFE-3702.pdf</p>

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	<ul style="list-style-type: none"> • CNC Turning: Operations • CNC Milling: Operations 	
<p>Rationale:</p>	<p>The Trades and Industry Credit Affirmation Team (CAT) utilized the following process to complete the assessment regarding the number of semester hours that would be awarded at the college level as block credit based on the industry credentials plus 900-clock hours earned at an Ohio Technical Center (OTC).</p> <ul style="list-style-type: none"> • Research the competencies tested by the industry credential(s). The Trades and Industry CAT reviewed information about the industry credential(s) to determine the competencies signaled by earning the credential(s). • Complete a nationwide internet search to review how other accredited colleges and universities are applying credit to National Institute for Metal Skills: Machining Level 1. The Kansas Board of Regents allows for up to 29 credit hours to be awarded for the NIMS Metalworking 1 towards an Associated of Applied Science degree to students who successfully complete NIMS Metalworking 1. • Review the value of local program advisory committee recommendations to meet the local industry needs. The Team concurred that there was value in having lab/practical, internships and/or externships as part of the program to meet local industry/business needs. • Review OSHA 10-Hour Hazard Recognition Training for Construction. OSHA 10 includes content essential to general-related work such as fall protection, personal protective equipment, fire prevention and safety, OSHA inspection procedures and more. <p>The Trades and Industry CAT confirms:</p> <ul style="list-style-type: none"> • The certifications exams are valid, reliable, and peer-reviewed on a regular basis to ensure the content accurately measures intended competencies. • The competencies measured by the NIMS Metalworking 1 and OSHA 10 certificate are developed by industry and reflect industry standards. <p>The Trades and Industry CAT also considered competencies signaled by lab and practical learning experiences. As part of the program offered by OTCs, student will participate in lab/practical experience as recommended by the local program advisory committee to meet local business and industry needs. The lab/practical experiences will reinforce the instructional competencies through hands-on learning.</p> <p>Upon successful completion of the 900+ hour program in the field of plumbing at an Ohio Technical Center and attainment of the following certifications:</p> <ul style="list-style-type: none"> • NIMS Metalworking 1 • OSHA 10- General Industry 	

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A student shall be awarded 30 technical semester hours towards completion of an Association of Technical Studies at a public degree granting college or university.

ONLY IF NECESSARY TO AFFIRM 30 CREDITS----STEP TWO: PROGRAM-RELATED COMPETENCIES OBTAINED OUTSIDE OF PRIMARY CREDENTIAL

	Details/Explanation	Comments
Additional related complementary credential(s) or badge(s) (e.g. OSHA 10, CPR).	OSHA 10-Hour: General Industry Certification	
Competencies demonstrated by additional credential attainment.	<p>OSHA 10- Hour: General Industry:</p> <p>Mandatory - 7 hours of training</p> <ul style="list-style-type: none"> • Introduction to OSHA • Walking and Working Surfaces, including fall protection • Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection • Electrical • Personal Protective Equipment • Hazard Communication <p>Elective - 2 hours of Training</p> <p>Must present at least two hours of training on the following topics. At least two topics must be presented. The minimum length of any topic is one-half hour.</p> <ul style="list-style-type: none"> • Hazardous Materials • Materials Handling • Machine Guarding • Introduction to Industrial Hygiene • Bloodborne Pathogens • Ergonomics • Safety and Health Program 	<p>Must be taught by a Certified OSHA Outreach Trainer.</p> <p>https://www.osha.gov/dte/outreach/program_requirements.pdf</p> <p>Used for all pathways. Elective and Optional components of the OSHA 10-Hour: General Industry Credential will be determined by local program advisory board.</p>

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	<ul style="list-style-type: none"> Fall Protection <p>Optional - 1 hour of Training. Teach other general industry hazards or policies and/or expand on the mandatory or elective topics. The minimum length of any topic is one-half hour.</p>																								
Description of additional program elements beyond primary credential.																									
Program related competencies/learning outcomes outside of credential(s). Include how competencies are demonstrated.																									
Other Parameters of Competency.																									
Related Programs as of Fall 2015:	Ohio Technical Center Choffin Career & Technical Center/Youngstown Knox County Career Center Mahoning Co Career & Technical Center Trumbull Career & Technical Center	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Program Name</th><th style="text-align: left;">Clock Hours</th></tr> </thead> <tbody> <tr> <td>Precision Machining</td><td>1080 Clock Hours</td></tr> <tr> <td>CNC Manufacturing Technologies</td><td>900 Clock Hours</td></tr> <tr> <td>Certified Industrial Technical Machining</td><td>990 Clock Hours</td></tr> <tr> <td>Machinists Training</td><td>900 Clock Hours</td></tr> </tbody> </table>	Program Name	Clock Hours	Precision Machining	1080 Clock Hours	CNC Manufacturing Technologies	900 Clock Hours	Certified Industrial Technical Machining	990 Clock Hours	Machinists Training	900 Clock Hours													
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OTHER COMMENTS.	Material covered is adequate to allow 30 hours of credit to be granted.																								

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AFFIRMED NUMBER OF TECHNICAL BLOCK CREDITS 30 semester hours

LENGTH OF TIME CREDENTIAL CAN BE USED FOR ONE-YEAR OPTION: Must have completed a 900+ hour Carpentry program at an Ohio Technical Center and hold all of the following certifications:

- NIMS Machining Level 1
- OSHA 10- General Industry

Co-chair signatures:



Dr. Barbara G. A. Wagner, Adult Division Director
Upper Valley Career Center – Ohio Technical Center



Kelly A. Zelesnik, Dean of Engineering Technologies
Lorain County Community College

Date: 8/1/2016